

Final Report

Spring 2008 surveys for Ivory-billed Woodpecker and bird counts in the Fakahatchee Strand State Preserve, Florida

Submitted to:

Fakahatchee Strand State Preserve, related to permit number 4-08-31

Submitted by:

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Date:

February 9, 2009

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Introduction

Surveys for Ivory-billed Woodpecker (*Campephilus principalis*) in areas of suitable habitat throughout the historical range of the species are recommended as an important action by the Ivory-billed Woodpecker Recovery Team of the U.S. Fish and Wildlife Service. To assist in this task, the Cornell Laboratory of Ornithology has deployed a mobile team of field biologists in swamp forests throughout the Southeast during the winter and early spring seasons of 2006-2007 and 2007-2008. Besides surveying for Ivory-billed Woodpeckers the team records daily numbers of birds encountered with associated effort data for the eBird database that is part of the Avian Knowledge Network. In the course of these surveys the team worked in the Fakahatchee Strand State Preserve during spring 2008. This report describes the study area, methods, results, and conclusions drawn from the 2008 surveys in the Fakahatchee.

Fakahatchee Strand State Preserve: justification as a search area

Tanner (1942) considered the most promising area for Ivory-billed Woodpeckers in the Big Cypress region the Thicketahatchie Swamp, which is now the Fakahatchee Strand State Preserve. Tanner's preference for the strand was based on it being the largest contiguous area of subtropical forest in south Florida and the occurrence of large trees in the strand. Tanner surveyed in the wider Big Cypress region during February 1937 and January-February 1939 for a total of 45 days. Of this effort only a small portion was spent in the Fakahatchee, presumably because of access difficulty. The Fakahatchee Strand was logged in the 1940s. At present the 70-year-old forest again may offer adequate habitat for Ivory-billed Woodpeckers with large second-growth cypress, maples, oaks, palm, and mahogany. Scattered, ancient trees remain that were non-commercial at the time of logging. Several reports of Ivory-billed Woodpeckers have emerged from or near the strand in the 1990s (Jackson 2004). Many areas of the

Fakahatchee Strand State Preserve have not been adequately surveyed for Ivory-billed Woodpecker. Taking the aforementioned factors into account, the Fakahatchee was selected as a priority search area for the Cornell mobile search team.

Methods

The team consisted of four full-time fieldworkers: N. Banfield (field leader), T. Baerwald, L. Ebel, and M. MacIntosh. Explorations and surveys were carried out from around sunrise until after sunset, and consisted of slow-moving searches on foot alternated with stationary watches of 30 to 120 minutes. Stationary watches were concentrated near sunrise and sunset, whereas active searches were usually conducted around midday. A daily GPS track was saved by each searcher, and a daily list of bird species and numbers of individuals was kept for entry in eBird. Searchers looked for large cavities and foraging sign that fit the description of IBWO activity (Tanner 1942), but coverage of areas was not sufficient to yield a complete inventory of these features. Double-knock trials were done during surveys. These trials consist of the imitation of the double-knock drum characteristic of *Campephilus* woodpeckers by knocking on a wooden box strapped to a tree trunk with a device made of two wooden dowels that are connected at a pivoting point, resulting in a double-knock with the correct interval for a *Campephilus* woodpecker. The tool has been tested and found highly effective with three Neotropical *Campephilus* species. Double knock trials were conducted by each crew member 3 – 5 times per day. In the Fakahatchee exploration was in some cases as one-day surveys and in other cases as multiple-day trips using backpacks for carrying food and equipment. Hammocks and tarps were used for overnight stays.

Itinerary and Survey Effort

The Fakahatchee Strand State Preserve was surveyed during March 8-9, 27-31, and April 1 and 3, 2008, mostly by two team members at a time. The total effort was 18 person-days and a total of 42.6 km was covered on foot. Figure 1 presents the GPS tracks of the searchers, showing these were concentrated in the north and south extremes of the preserve.

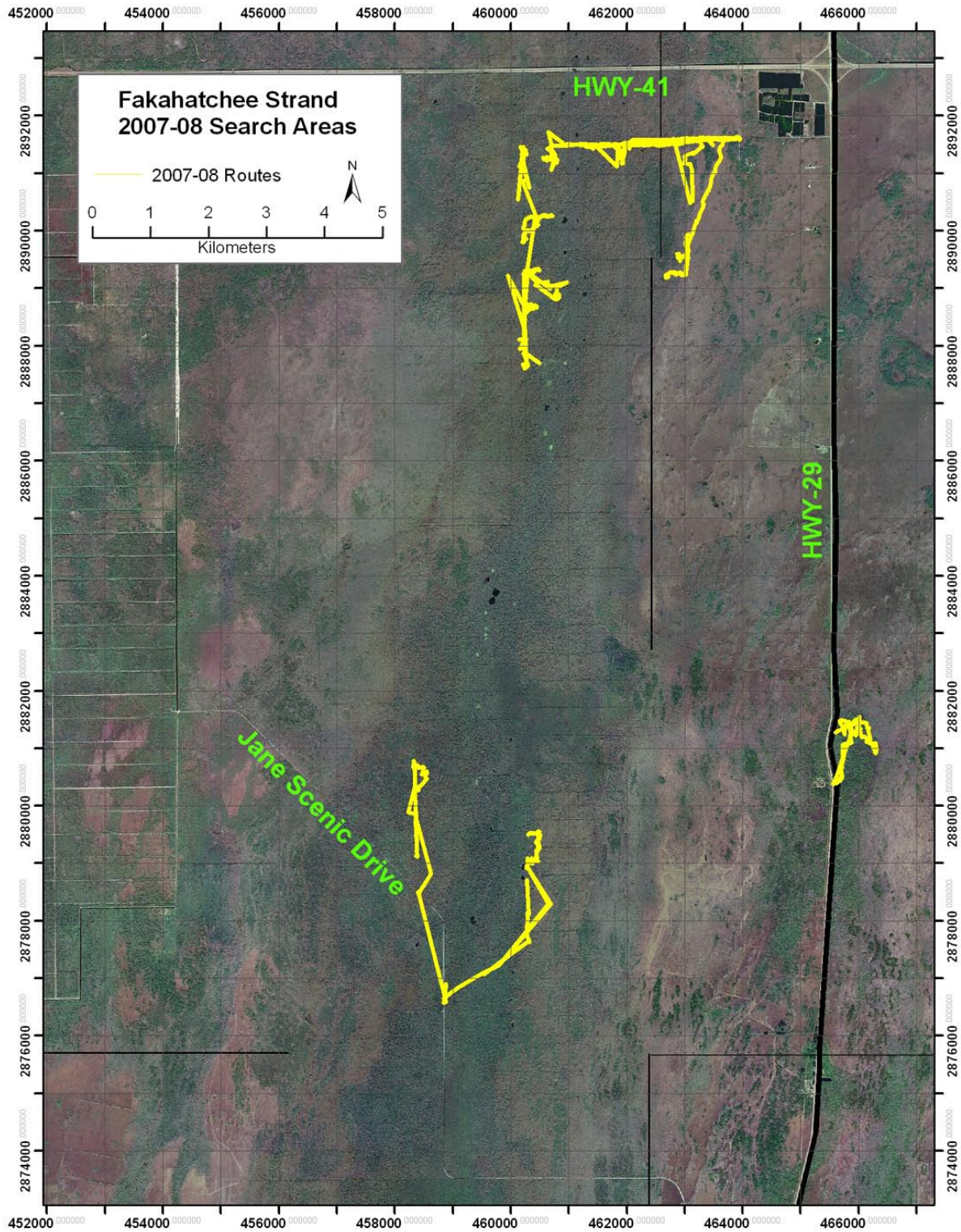


Figure 1. Surveys tracks into the Fakahatchee Strand State Preserve as recorded by GPS.

Results

No Ivory-billed Woodpeckers were recorded during surveys in the Fakahatchee Strand State Preserve. The forest that was seen included large re-growth and remnant bald cypress and red maple trees. The understory in the Fakahatchee Strand was very dense and there were few passable roads or trails. An area of interest in the central portion of the preserve was headed for on foot and off-trail, using machetes to clear a patch, but could not be reached. A total of 34 bird species were recorded (Appendix 1), none of which were of particular conservation concern or unusual for the south Florida region.

Discussion

In addition to the areas surveyed in the Fakahatchee Strand State Preserve described in this report, during spring 2008 other areas in south Florida were surveyed including the Florida Panther National Wildlife Refuge, Big Cypress National Preserve, Everglades National Park, and the Picayune Strand State Preserve. The general picture that emerged from these surveys was that south Florida contains a remarkably large contiguous area of protected lands that has scattered areas of forest suitable for Ivory-billed Woodpeckers, including pine forests, mangrove forests, bald cypress stands, and subtropical hardwood strands and hammocks. It is the largest block of protected areas in the historical range of the Ivory-billed Woodpecker and has received too little survey effort for the species. Based on these findings, the Cornell Laboratory of Ornithology decided to field a larger team of six field biologists during a longer period of time, i.e. 10 weeks, in early 2009. The team is on the ground at the time of submission of this report. Working in the winter rather than spring, the team will ensure that surveys more closely overlap with the mating and early nesting season of the Ivory-billed Woodpecker in south Florida (Tanner 1942), and winter work may ease surveys to some degree by avoiding a dense leaved-out understory and insects. The team would like to make a renewed effort to reach the remote central part of the Fakahatchee Strand for surveys. We appreciate help with renewal of our permits and advice on access routes from the Fakahatchee Strand State Preserve.

Acknowledgements

We thank the Preserve Biologist, Mike Owen for sharing his in-depth knowledge of the Fakahatchee Strand State Preserve, and the Bureau Chief, Valinda Subic, for issuing our research permit.

References

Jackson, J. A. 2004. In search for the Ivory-billed Woodpecker. Smithsonian Institution Press, Washington D. C.

Tanner, J. T. 1942. The Ivory-billed Woodpecker. Research Report No. 1. National Audubon Society, New York.

Appendix 1

Excel sheet with bird observation data made available to the eBird and Avian Knowledge Network databases: eBirdFakahatchee2008.xls